

CENTURY OIL & GAS CORPORATION
Drilling Report


CENTURY VICKERS #6-15

Roosevelt Co., MT (N.W. Poplar)

TD: 6500'

07/28/81 RU Go Wireline. Perforated 6400-6403', 6407-6409', 6383-6385', 6393-6395', 13 holes total, 1 HPF inclusive with 4" hollow carrier loaded with DML 23 charges. RIH with Baker Model E Retrievalmatic packer on tubing. Set packer at 6306'. Swabbed tubing to 6246'. No fluid entry. RU Halliburton. Pumped 1000 gallons 15% MCA with 17 balls. Pumped at 3.3 BPM, caught fluid at 930 gallons rate 0.9 BPM at 3800 psi. Broke to 3000 psi 1.4 BPM at 1030 gallons. Acid hit at 1180 gallons 3 BPM at 2500 psi. Balled out at 1820 gallons total fluid. Surged balls off perfs completed displacement of acid at 2:30 pm. ISIP 1750, 5 minutes 1550, 10 minutes 1500, 15 minutes 1410, 30 minutes 0 psi. Made 18 swab runs. Recovered 49 bbls ± fluid (5 runs to swab to packer - 30 bbls water and spent acid, 3 runs in 1 hour 7.1 bbls, 3 runs in 1 hour 5.6 bbls, 5 runs in 1 hour 3.9 bbls, 2 runs in ½ hour 2.5 bbls). No trace of oil. Load volume 52 bbls. 3 bbls under load. Got some gas odor during last 8 swab runs - no blow of gas. SD at 8:30 pm. Daily cost - \$10,965, CCC - \$64,868.

07/29/81 25± psi on tubing. Made 2 swab runs. Initial FL at 900'. Recovered 15 bbls acid water with no trace of oil. Total fluid 64 bbls (12 bbls over load). RU Halliburton, pressured annulus to 1000 psi. Pumped 9400 gallons gelled water acid frac with N₂ as follows (additives per prognosis plus 3 gal/1000 3-N non-emulsifier):

- 
- A. 20 MCF N₂ pad.
 - B. 1000 gallons Versagel 2400 pad.
 - C. 2000 gallons 20% CRA.
 - D. 1000 gallons fresh water flush with 8 frac balls.
 - E. 1000 gallons Versagel.
 - F. 2000 gallons 20% CRA.
 - G. 2400 gallons flush.

Job balled out 440 gallons into stage E. Surged well back twice before restarting job. All fluids contained 500 CF/bbl N₂. Pumped job at 6 BPM±. Job complete at 10:30 am. ISIP 2750, 5 minute 2610, 15 minute 2590. Started flowing back at 11:00. Opened to pit thru Halliburton choke for 2½ hours. Got N₂ with heavy liquid mist. RU hardline to tank and continued to flow. Total daily recovery 109 bbls. Total load 224 bbls (115 bbls to recover). Well dried up at 7:15 - only dry gas. SI. Made 7 bbls from 6:15 to 7:15. SD at 7:15. Daily cost - \$15,705 (Halliburton - \$13,150), CCC - \$80,573.

CENTURY OIL & GAS CORPORATION
Drilling Report

CENTURY VICKERS #6-15
Roosevelt Co., MT (N.W. Poplar)
TD: 6500'

07/30/81 TP 50± psi, blew down. Started swabbing initial FL at 1000'.
Made 29 swab runs, recovered 128 bbls as follows:

- A. 10 swab runs to get FL to 5000'. Recovered water with good N₂ blows after each run.
- B. 5 runs, swabbed from 5000' to 5500', show of oil on 11th swab run (cum recovery 65 bbls for day, 174 bbls after frac). Oil show increased 11th thru 15th run.
- C. 14 runs from packer. Recovered additional 63 bbls. Oil content erratic 18% to 45%. Found stable FL 1200' to 1500' above packer. 3 swab runs/hour, average and stable rate 10.8 bbls/hour. Strong constant blow of hydrocarbon gas during and between each swab run.

Stopped swabbing at 6:00 pm. Drained tank to oil level. Had 16.7 BO in tank. Average cut since first appearance of oil 28%. SD at 7:30 pm. Total day recovery 128.3 bbls, cum recovery after frac 237.3 bbls (load 224 BW). Daily cost - \$2,502, CCC - \$83,075.

07/31/81 TP 275 psi. Bled down. Started swabbing at 8:00 am. Swabbed 6 hours, 18 runs, recovered 85.8 bbls. Cumulative recovery 323.1. Last 3 hours 10.8 BPH. FL 1200' to 1500' above packer. Erratic oil cut, estimated 30% or more. POOH at 3:00 pm. RIH with 2-3/8" tubing as follows: 4' Bullplug pup joint, 3' perf nipple, seat nipple at 6378', Guiberson anchor/catcher at 6263', 208 joints tubing, landed at 6386'. Nipple down BOP, NU tubing head. SD for day at 8:30. Drained tank, had 27 BO for 7/30 and 7/31. Recovery over load 99.1 bbls, average oil cut after load recovery 27%. Daily cost - \$3,684, CCC - \$86,759.

08/01/81 PU National 2x1½x16x16½x17½ RHBC pump with gas lock breaker. WO pump parts 1½ hours. RIH with 184 3/4" Norris 78 rods, 68 7/8" Norris 78 rods with special clearance couplings, 8', 6', 4', 2' 7/8" pony rods, 1½" x 22' polish rod. Installed stuffing box. RD and release rig at 6:00 pm. Drop from report until on production. Daily cost - \$18,110, CCC - \$104,869.

08/07/81 Pads for treater, pumping unit, and oil storage tanks completed. Installing tanks today. All other equipment has been ordered and will be spotted on location early next week.

08/21/81 Waiting on skid extension for pumping unit. All facilities now installed.

08/24/81 Waiting on skid extension for pumping unit.

08/27/81 Installing pump base extension. Expect to be on production 8/28/81.

52

CENTURY OIL & GAS CORPORATION
Drilling Report

CENTURY VICKERS #6-15
Roosevelt Co., MT (N.W. Poplar)
TD: 6500'

- 08/31/81 Finished installing pump base extension. Hooked up gas engine. Started up pump at 5:00± pm 8/29/81. Well pumped up and pumped for 3 hours. SD unit. Engine and weights need adjusting. Should be on production 8/31/81.
- 09/01/81 Placed well on production at 4:00 pm 8/31/81 at 12 SPM. At 12:30 pm 9/1/81 pumping all water at unmeasured rate. Well now making some gas.
- 09/02/81 Pumped 151 BW, no oil. Pump now running at 11½ SPM and 86" stroke.
- 09/03/81 Pumped 153 BW and no oil in 24 hours. Have 4# natural gas on treater.
- 09/04/81 Pumped 160 BW and no oil in 24 hours. Now has 18# gas pressure on treater.
- 09/05/81 Pumped 157 BW and 8 B0 in 24 hours ending 12:30 pm 9/5/81 (treater also loaded with oil). Wellhead cut 13% oil. 18# gas pressure on treater.
- 09/06/81 Pumped 138 BW and 8 B0 in 24 hours. Pump speed slowed from 13 SPM to 11 SPM, increased to 12 SPM. 20# pressure on treater. Treater running occasionally on natural gas.
- 09/07/81 Pumped 136 BW and 11.69 B0.
- 09/08/81 Pumped 135 BW and 13.36 B0.
- 09/09/81 Pumped 135 BW and 11.69 B0.
- 09/10/81 Pumped 135 BW and 10.02 B0 at 11-3/4 SPM. Running equipment on approximately ½ propane and ½ natural gas. Treater pressure 16#.
- 09/11/81 Pumped 135 BW and 11.69 B0 at 11½ SPM. Treater pressure 16#.
- 09/12/81 Pumped 135 BW and 11.69 B0.
- 09/13/81 Pumped 139 BW and 10.03 B0.
- 09/14/81 Pumped 138 BW and 6.68 B0.
- 09/15/81 Pumped 140 BW and 8.35 B0 in 24 hours at 12 SPM and 83" stroke.
- 09/16/81 Shot fluid level as follows: found pumping fluid level 169 joints from surface (shot 4 times), found 30 minute SI fluid level 128 joints from surface (shot twice). Top perforation at 6383', estimate 1195' fluid above perforations. Pumped 136 BW and 10 B0.

CENTURY OIL & GAS CORPORATION
Drilling Report

CENTURY VICKERS #6-15

Roosevelt Co., MT (N.W. Poplar Prospect)

TD: 6500'

09/17/81 Pumped 8.35 BO and 139 BW at 12 SPM.
09/18/81 Pumped 9.48 BO and 137 BW at 12 SPM.
09/19/81 Pumped 8 BO and 140 BW. Unit slowed to 11½ SPM.
09/20/81 Pumped 8 BO and 138 BW.
09/21/81 Pumped 15 BO and 132 BW. Circulated tank - no water in tank.
09/22/81 Pumped 7 BOPD and 133 BWPD.
09/23/81 Pumped 8 BOPD and 135 BWPD.
09/24/81 Pumped 12.5 BOPD.
09/25/81 Pumped 8.5 BOPD and 129 BWPD.
09/26/81 Pumped 6.68 BO and 127 BW.
09/27/81 Pumped 7 BO and 124 BW.
09/28/81 Pumped 8 BO and 125 BW.
09/29/81 Pumped 7.1 BO and 122 BW.
09/30/91 Shot fluid level as follows: found pumping fluid level 206 joints from surface, found SI fluid level 204 joints from surface; top perforation at 6383', estimate 195' fluid above top perforation. Pumped 7 BO and 120 BW.
10/01/81 Pumped 5 BO and 118 BW.
10/02/81 Pumped 8 BO and 117 BW.
10/03/81 Pumped 8 BO and 117 BW. 12 SPM slowed to 11 SPM.
10/04/81 Pumped 8 BO and 116 BW.
10/05/81 Pumped 7 BO and 116 BW. Shipping oil this week.
10/06/81 Pumped 6 BO and 114 BW. FINAL REPORT.

FORM 1011 F-2

NO. 8

DATE 7-8	CUSTOMER ORDER NO.	WELL NO. AND FARM Vickers 6-15	COUNTY Roosevelt	STATE MT
OWNER Century Oil & Gas	CONTRACTOR Bird #5	DELIVERED FROM Glendive	CODE 55530	SERVICE TICKET NO. 206130
CHARGE TO Century Oil & Gas	DELIVERED TO location			
MAILING ADDRESS	PREPARED BY D.C. Haas			
CITY & STATE	RECEIVED BY <i>[Signature]</i>			

[illegible]

* PAGES UNLESS OTHERWISE INDICATED

CUSTOMER

55

CENTURY OIL & GAS CORPORATION
Drilling Report

CENTURY VICKERS #6-15 (Conversion to Water disposal)
Roosevelt Co., MT (N.W. Poplar Prospect)
TD: 6500'
COG Int:

2/10/83 Present operations: preparing to pull tbg. to set CIBP and perforate. MIRU Signal Rig #18, RU tbg. tools for 2-3/8" tbg. SDFN @ 5:30 pm. CWC \$905.

02/11/83 (Completion day 2) Present operations: perforate Dakota. PBTD 4175'. POOH w/62 strands of 2-3/8" EUE tbg. Pulled remaining tbg. - ~~laying down~~ RU Wellex, set CIBP @ 4190'. Dumped 2 sx cmt. (Est. PBTD 4175'). Run CBL/GR/CCL for correlation purposes from 4110'-3810'. Made 5 runs w/4" OD csg. gun perf. 3960'-4060' 1 JSPF (total 101 holes). FL @ 1500' on way in with first gun, FL @ 1100' in 1/2 hr. after perforating bottom 21', FL @ 875' in 1/2 hr. after third gun, FL @ 795' in 1/2 hr. after fourth gun, FL @ 750' in 2 hrs. SDFN @ 8:30 pm. DCC \$7,700, CCC \$8,605.

02/12/83 (Completion day 3). Present operation: Complete downhole for injection. Details: RIH w/ 2-3/8" tubing and production packer and set. RU Western to pump test Dakota for injectivity determination. Did not acidize Dakota at this time. --Pump water as follows:

<u>Rate</u>	<u>Pressure</u>
1.0 BPM	1100- 600 psig
1.8 BPM	1000 psig
3.2 BPM	1500 psig
1.0 BPM	800 psig
5.0 BPM	1950 psig

ISIP = 750 psig, Static FL @ 700'. Shut well in for future water disposal operations. FINAL REPORT.

CENTURY OIL & GAS CORPORATION
Production Note

VICKERS #1 SWDW

08/15/83 Shut disposal operations down to stimulate Dakota with acid-surfactant job. Injection pressures running 875-900 psig last week (8-8 to 8-12). Details to follow on tomorrow's report.

08/16/83 Well returned to disposal status following acid job. Details: Pump 2000 gallons 15% FE-acid containing 2 gals/1000 gals Morflo and 1 gal/1000 gals HAI-75. Overflush w/ 400 bbls produced salt water. Max inj. = 3.8 BPM, max pressure = 1150 psig. ISIP = 1170 psi, 5 min SIP = 125 psi, 1- mins SIP = 80 psi, 15 mins SIP = 20 psi. Injection pressure averaging 875 psig during hte wekk preceding the acid job. Injection pressure following acid job averaging 400 psig during 4 hours of pumping. Will monitor for one week for stabilization. FINAL REPORT. CC \$3,357.



Century Oil & Gas Corporation

To Betty Babcock Date June 9, 1983
From Jack McWilliams
Subject LIST OF EQUIPMENT ON VICKERS #1 SWDW

1 - Waukesha VRG220 gas engine	\$ 5,500
2 - 400 bbl fiberglass tanks with connections	12,000
1 - Wheatley Model 323 pump with accessories	12,500
1 - Winterized building	3,500
Miscellaneous	1,500

JBM/kw

PLANS FOR WELL FAILURES
Vickers #6-15 SWDW

Contingency plans: An emergency standby earthen pit in the event of interrupted disposal service to the Vickers #6-15 SWDW facility is north of the 3-400 barrel fiberglass water tanks on the disposal location. Should this pit be required to hold excessive volumes, water would be hauled to our Clark #1 SWDW located NESE Section 20-T29N-R50E, Roosevelt County, Montana

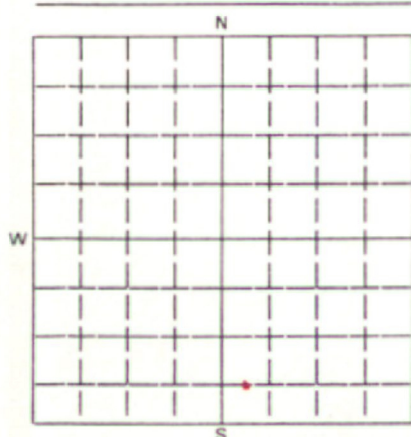

 UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
 WASHINGTON, DC 20460

PLUGGING AND ABANDONMENT PLAN
NAME AND ADDRESS OF FACILITY

 Vickers #6-15 SWDW
 SWSE Section 6-T29N-R50E
 Roosevelt County, Montana

NAME AND ADDRESS OF OWNER/OPERATOR

 Century Oil & Gas Corporation
 7887 East Belleview, Suite 800
 Englewood, Colorado 80111

 LOCATE WELL AND OUTLINE UNIT ON
 SECTION PLAT — 640 ACRES


STATE

MT

COUNTY

Roosevelt

PERMIT NUMBER

NA

SURFACE LOCATION DESCRIPTION

SW 1/4 OF SE 1/4 OF 1/4 SECTION 6 TOWNSHIP 29N RANGE 50E

LOCATE WELL IN TWO DIRECTIONS FROM NEAREST LINES OF QUARTER SECTION AND DRILLING UNIT

 Surface Location 660 ft. from (N/S) Line of quarter-section
 and 2130 ft. from (E/W) Line of quarter-section

TYPE OF AUTHORIZATION

- ☒ Individual Permit
☐ Area Permit
☐ Rule

Number of Wells 1

WELL ACTIVITY

- ☐ CLASS I
☒ CLASS II
☒ Brine Disposal
☐ Enhanced Recovery
☐ Hydrocarbon Storage
☐ CLASS III

Lease Name Vickers

Well Number 6-15

CASING AND TUBING RECORD AFTER PLUGGING

SIZE	WT(LB/FT)	TO BE PUT IN WELL (FT)	TO BE LEFT IN WELL (FT)	HOLE SIZE
8 5/8	24	418	418	12 1/4
5 1/2	15.5 & 17	6508	6508	7 7/8

METHOD OF EMPLACEMENT OF CEMENT PLUGS

- ☒ The Balance Method
☐ The Dump Bailer Method
☐ The Two-Plug Method
☐ Other

CEMENTING TO PLUG AND ABANDON DATA:

	PLUG #1	PLUG #2	PLUG #3	PLUG #4	PLUG #5	PLUG #6	PLUG #7
Size of Hole or Pipe in which Plug Will Be Placed (inches)	5 1/2	5 1/2					
Depth to Bottom of Tubing or Drill Pipe (ft.)	4060	1200					
Sacks of Cement To Be Used (each plug)	100	155					
Slurry Volume To Be Pumped (cu. ft.)	106	164					
Calculated Top of Plug (ft.)	3286	Surface					
Measured Top of Plug (if tagged ft.)	NA	NA					
Slurry Wt. (Lb./Gal.)	16.4	16.4					
Type Cement or Other Material (Class III)	Class H	Class H					

LIST ALL OPEN HOLE AND/OR PERFORATED INTERVALS AND INTERVALS WHERE CASING WILL BE VARIED (If any)

From	To	From	To
3960	4060		

Estimated Cost to Plug Wells

\$10,000

CERTIFICATION

I certify under the penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment. (Ref. 40 CFR 144.32)

NAME AND OFFICIAL TITLE (Please type or print)

Ted D. Brown, Staff Engineer

SIGNATURE

DATE SIGNED

7/27/84 60